

REMARKS

Claims 1-22 are pending in the application.

Claims 1-9, 12-14, 16-18 and 20-22 are rejected.

Claims 10, 11, 15 and 19 are objected to.

New Claim 23 has been added.

Reconsideration of the Claims is respectfully requested.

I. **EXAMINER INTERVIEW**

Applicant thanks the Examiner for holding the in-person interview with the Applicant's representatives, Mr. Peter Lando and Mr. Terry Daglow, on October 13, 2004, and Applicant believes that the Interview Summary form provides proper recordation of the interview.

II. **OBJECTIONS TO CLAIMS 10,11, 15 AND 19**¹

Applicant thanks the Examiner for the indication that Claims 10, 11, 15 and 19 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant has not elected to rewrite these claims in independent form, at this time.

¹ Applicant notes that in the prior office action dependent Claims 4 and 5 were objected to, and in the present Office Action dependent Claims 4 and 5 are now rejected under 102 by Hopper (US 3,378,673).

III. REJECTION UNDER 35 U.S.C. § 102

Claims 1-2, 4-5, 7-8 and 21-22 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hopper, et al. (US 3,378,673). The rejection is respectfully traversed.

A cited prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. MPEP § 2131; *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). Anticipation is only shown where each and every limitation of the claimed invention is found in a single cited prior art reference. MPEP § 2131; *In re Donohue*, 766 F.2d 531, 534, 226 U.S.P.Q. 619, 621 (Fed. Cir. 1985).

The Office Action generally argues that Hopper discloses “an inner insulator and an outer insulator of similar synthetic resins” and “that the inner layer and outer layer are of similar material.” Applicant respectfully submits that the Office Action has failed to establish a prima facie case of anticipation because Hopper does not disclose that the inner and outer insulators are fused together.² Applicant’s claim(s) recite: (1) an outer insulator (or means) and inner insulator (or means) having similar melting points and are fused together (Claims 1 and 7); (2) an outer insulator and inner insulator having similar melting points and are fused together such

² In addition, Hopper fails to describe that the inner and outer insulator materials have similar melting points. Hopper’s molding material 10 is described as “a synthetic resin cured in place and may be similar in resin composition to the body 2.” Col. 2, lines 43-45. In fact, the molding material 10 and the body 2 appear to have different melting points - as Hopper describes that the heater tape 3 becomes “embedded” in the molding material 10, but fails to state that the tape 3 becomes embedded in the body 2. See also, Figures 2 and 3; Col. 2, lines 40-44.

that the outer and inner insulator adhere to each other (Claim 21); and (3) an outer and inner insulator are fused together such that the inner and outer insulator are joined by melting together (Claim 22).

It appears from reviewing the Office Action's 103 rejection, and as learned during the examiner interview, that the Examiner is taking the position that the term "fuse" reads on the term "cure" - as Hopper discloses that the molding material 10 (i.e., the outer insulator) is "cured in place." Hopper, Col. 2, lines 43-44. There are two reasons why such position is improper.

First, as noted above, only Hopper's molding material 10 is described as being "cured in place." Thus, the only curing disclosed by Hopper is the *curing of Hopper's molding material 10*. In contrast, Applicant recites that the inner and outer insulators are "fused together." Thus, the term "fuse together" does not equate to "cure" - as is it illogical and without reason to state that curing of a single material (such as molding material 10) equates to the fusing together of the molding material 10 and the body 2 (which has not been described). Therefore, Hopper's description that the molding material 10 is cured does not refer or describe any fusing together or other interaction as between the outer molding material 10 and the inner body 2. Thus, Hopper fails to describe two materials are "fused together."³

³ Nor is there any disclosure that the body 2 and molding material 10 "are joined by melting together" (as claimed in Applicant's independent Claim 22).

Second, the term "cure" is not the same as "fuse." The Office Action argues that the term "fuse" is defined as *to stitch by applying heat and pressure with or without the use of adhesive*. Applicant notes that the more common and readily understood definitions of the term "fuse"(verb) in Webster's are (1) to reduce to a liquid or plastic state by heat; (2) to blend thoroughly by or as if by melting together; (3) to become fluid with heat; and (4) to become blended or joined by or as if by melting together. Applicant further notes that the only relevant definition of the term "cure" (verb) in Webster's is either (1) *to subject to a preservative process*, or (2) *perfect by chemical change (as rubber by vulcanizing, plastics by treating with heat or chemicals to make them infusible and insoluble, or green concrete by maintaining proper conditions of moisture and temperature)*, and the only relevant definition of the term "cure" (noun) is *a process or method involving aging, seasoning, washing, drying, heating, smoking, or otherwise treating whereby a product is preserved, perfected, or readied for use*. See, Webster's Third New International Dictionary, Unabridged. Merriam-Webster, 2002, attached. Thus, using these relevant definition(s), the curing of Hopper's molding material 10 results in a preserved, perfected, or ready for use product. Thus, the curing of the molding material 10 in Hopper fails to describe, define or read on the term fused together - as recited in Applicant's independent Claims 1, 7, 21 and 22.

Accordingly, Hopper fails to disclose identically each and every element of Applicant's claimed invention as arranged in the claims. Applicant respectfully requests the Examiner withdraw the § 102(b) rejection of Claims 1-2, 4-5, 7-8 and 21-22.

IV. REJECTION UNDER 35 U.S.C. § 103

Claims 1-3, 6-9, 12-14, 16-18 and 20-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Nita (US 5,951,539) in view of Hopper (US 3,378,673). The rejection is respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a *prima facie* case of

obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142.

The Office Action appears to argue that (1) the term "fuse" in its broadest interpretation (referencing one definition in Webster's Collegiate Dictionary Tenth Edition as "to stitch by applying heat and pressure with or without the use of adhesive") is disclosed by Nita, and (2) though Nita does not disclose the inner layer and outer layer having similar melting points, the Hopper reference discloses a heated hose having inner and outer layers of similar material, and thus it would be obvious to make the inner and outer insulators of Nita with the "same or similar material, and melting points" to protect the conductors at the same time. See, Office Action, page 3.

The Office Action's misplaced reliance on the particular definition of "fuse", the failure to address the recited element/feature "fused together", and the fact that Hopper is limited to only disclosing that the molding material 10 is "cured in place" (all as noted above), as well as the specific and limited nature of the disclosures of Hopper and Nita (as described below), all result in the conclusion that Applicant's claims are non-obvious.

Hopper discloses an electrically heated hose assembly. The conduit portion of the hose assembly includes an inner body 2 (e.g., reinforced synthetic resin such as vinyl) having heater tape 3 spirally wrapped about the inner body 2, wherein the heater tape 3 includes two high resistance wires 4 forming a single elongated current carrying loop. When connected to electrical power, the wires carry an electrical current that generates heat for heating the insulator body 2 (thus preventing the freezing of liquid in the hose). Col. 2, lines 15-40.

Hopper further recites a molding material 10 described as follows:

The heater tape 3 and thermostat 9 are maintained in contact and in desired position against the body 2 by a layer of molding material 10 in which these parts become embedded. The molding material 10 is preferably a synthetic resin cured in place and may be similar in resin composition to the body 2 so as to retain and protect the heater tape and yet not unduly restrict the flexibility of the body 2. Col. 2, lines 40-47. (emphasis added).

Hopper specifically describes the heater tape 3 as being held "against the body 2" by the molding material 10, and that the heater tape is embedded in the molding material 10. Hopper teaches that the heater tape is embedded in the molding material, but fails to describe the heater tape as being embedded in the body 2 -- only that it is held "against the body 2". Thus, the only conclusion that can be reached is that Hopper's body 2 and molding material 10 are not "fused together" as recited in Applicant's independent Claims 1, 7, 21 and 22, or "melted together" as recited in Applicant's independent Claim 14, but that the molding material 10 is simply material molded about the body 2.

As noted in Applicant's previous responses, Nita discloses:

A shrink wrappable layer of polyethylene tubing is then placed over the tubing and heated so to shrink-wrap the polyethylene and pull the tubing into intimate contact with the reinforcing member (206) winding and perhaps with the inner liner (202). (Emphasis added). Col. 13, lines 9-13.

This passage evidencing that Nita fails to disclose melting the inner insulator and outer insulator is further buttressed by the following passage in Nita:

As was the case above, it is within the scope of this invention to place an adhesive on the exterior of the assembly at this point to assist in providing adherence of the ribbon (206) and inner liner (202) to the outer polymeric coverings (212, 214, 216, and 218) discussed below. The use of adhesives in this step or in that mentioned above depend principally upon the choice of materials in those outer polymeric coverings. (Emphasis added). Col. 12, lines 38-45.

In view of these passages, it is evident that Nita appears only to recite that the outer polymeric coating appears to be melted or flowed (and the shrink-wrap tubing compresses the soft material against the ribbon, and perhaps against the inner insulator), and fails to disclose that the inner and outer insulators are fused together as recited in Applicant's independent Claims 1, 7, 21 and 22, or melted together as recited in independent Claim 13. Thus, Nita does not disclose this element/feature of Applicant's claimed invention.

Therefore, the proposed combination of Hopper and Nita fails to disclose, teach or suggest that the inner and outer insulator are fused together (or joined together by melting) - as recited in Applicant's claims.

In addition to the identified deficiency of both references, the Applicant respectfully submits that there is no teaching or suggestion to even combine the Nita and Hopper references.

Hopper is directed to a water supply conduit (hose assembly) for use in water supply/plumbing system of homes and other water supply operations (e.g., house trailer, outside stock (presumably livestock) watering systems) to heat the hose conduit to prevent liquid therein from freezing. In distinct contrast, Nita is directed to a medical catheter for insertion into a human body in the medical field.⁴ Thus it is apparent that the two references are not properly combinable for purposes of establishing obviousness.

Accordingly, the Applicant respectfully requests withdrawal of the § 103(a) rejection of Claims 1-3, 6-9, 12-14, 16-18, 20-22.⁵

V. CONCLUSION

As a result of the foregoing, the Applicant asserts that the remaining Claims in the Application are in condition for allowance, and respectfully requests an early allowance of such Claims.

⁴ Nita generally describes a catheter having a ribbon (or wire) constructed of a variety of different materials. Metallic and non-metallic ribbons, fibrous materials and elastic alloys may be used. Since these types of materials are disclosed by Nita to construct the ribbon, and furthermore, since Nita fails to address or mention electrical stimulation leads or electrodes, Nita only teaches use of a ribbon for mechanical purposes - strength, torqueability, kink resistance and flexibility. Therefore, Nita's catheter does not have conductors.

⁵ Additionally, with respect to dependent Claims 3, 9 and 18 (and claims dependent thereon), Nita fails to disclose a plurality of conductors, and wherein the inner insulator is fused to the outer insulator to electrically isolate each one of the plurality of conductors (or means for conducting) from one another. See, Nita, Figures 2D, 3C, 6-12.


If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *rmccutcheon@davismunck.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Davis Munck Deposit Account No. 50-0208.

Respectfully submitted,

DAVIS MUNCK, P.C.

Date: 11/23/2004


Robert D. McCutcheon
Registration No. 38,717

P.O. Drawer 800889
Dallas, Texas 75380
(972) 628-3632 (direct dial)
(972) 628-3600 (main number)
(972) 628-3616 (fax)
E-mail: *rmccutcheon@davismunck.com*



Print this entry



20 entries found.

To select an entry, click on it.

cure[1,noun]
cure[2,verb]
cure[3,noun]
cold cure
cure-all
dry-cure

RECEIVED

NOV 30 2004

Technology Center 2600

Main Entry: ²cure

Pronunciation: "

Function: *verb*

Inflected Form(s): **-ed/-ing/-s**

Etymology: Middle English *curen* to take care of, heal, from Middle French *curer* to take care of, heal, cleanse, from Latin *curare* to take care of, heal, from *cura*, n.

transitive verb

1 : **HEAL** **a** : to restore to health, soundness, or normality <cure him of his illness> <curing his patients rapidly by new procedures> <a child cured of lisping> **b** : to bring about recovery from : **REMEDY** <any physician can cure a clean wound> <antibiotics cure many formerly intractable infections>

2 a : to treat so as to remove, eliminate, or rectify <every fact you learn cures ignorance or confusion -- J.M.Barzun> <no amount of sweeping and clean mats could cure the bedbugs> **b** : to free or relieve (a person) from an objectionable or harmful condition or inclination <the loss cured him of his gambling> <a rebuff that cured him of his brash aggressiveness>

3 : to subject to a preservative process <cure meat by salting> <drying the hay to cure it> <curing tobacco by aging it> : perfect by chemical change (as rubber by vulcanizing, plastics by treating with heat or chemicals to make them infusible and insoluble or green concrete by maintaining proper conditions of moisture and temperature)

4 : to clear (land) for cultivation or other use

5 : to make acceptable in legal procedure (the appearance of objectionable evidence, the omission of relevant matter, or supposed error in charging the jury) by admission of certain evidence giving charges considered under the law to nullify any effect prejudicial to the appellant that any defective evidence or charges might have

intransitive verb

1 of a product : to undergo a preservative process

2 a : to effect a cure <careful living cures more often than it kills> **b** : to take a cure (as in a sanatorium or at a spa)

synonyms **HEAL**, **REMEDY**: cure and **HEAL** may apply, literally and often interchangeably, to wounds or diseases <mind and will are so powerful they can heal the sick -- C.A.Dial> **CURE**, however, more commonly applies to restoration of a healthy or normal condition of body or organism <cure a headache> <cure a cold> **HEAL** commonly applies to restoration to soundness of an affected part after a wound or lesion <heal an open sore> <heal a cut in the hand> Figuratively, one cures a bad condition of things, but heals a breach as in human relations <cure him of his faults -- Douglas Stewart> <went far toward curing the cynicism of youth -- Dixon Wecter> <half a century's estrangement between the farmers and the townsmen may yet be healed -- Roy Lewis & Angus Maude> <heal a split in his own Liberal Party -- Time> **REMEDY** applies to the use of any means of correction or relief of a morbid or evil condition <remedy the common cold> <anxieties



Print this entry

20 entries found .

To select an entry, click on it.

cure[1,noun]
cure[2,verb]
cure[3,noun]
cold cure
cure-all
dry-cure

Main Entry: ¹**cure**

Pronunciation: 'kyù(ə)r, -ùə

Function: *noun*

Inflected Form(s): -s

Etymology: Middle English (also, care), from Old French, from Medieval Latin & Latin; Medieval Latin *cura* cure of souls, from Latin, care, medical attendance, healing; akin to Old Latin *coiraveront* they cared for, Paelignian *coisatens*, and perhaps to Gothic *ushaista* needy

1 a : spiritual charge of a parish : the office of a parish priest or of a curate **b** : **CURACY**, **PARISH**

2 a obsolete : a medical course of treatment for a bodily ailment -- used without implication of success **b** : recovery from a disease <his *cure* was complete>; *also* : remission of signs or symptoms of a disease <clinical *cure*> especially during a prolonged period of observation <5-year *cure* of cancer> : return to freedom from an infecting agent <biologic *cure* of typhoid> -- compare **ARREST**, **QUIESCENCE**, **REMISSION** **c** : a drug, treatment, regimen, or other agency that cures a disease <water *cure*> <quinine is a *cure* for malaria> **d** : a course or period of treatment; *especially* : one designed to interrupt an addiction or compulsive habit <take a *cure* for alcoholism> or to improve general health <an annual *cure* at a spa> **e** : **SPA** <one of the fashionable *cures*>

3 : **REMEDY** : a procedure or agency that heals or permanently alleviates a troublesome or harmful situation <the attractively plausible idea that the *cure* for negative attitudes and misinformation is information -- W.H. Whyte>

4 : a process or method involving aging, seasoning, washing, drying, heating, smoking, or otherwise treating whereby a product is preserved, perfected, or readied for use

5 maritime law : the medical care awarded a merchant seaman injured or taken sick in the course of his duties

synonym see **REMEDY**

© 2003 by Merriam-Webster, Inc.